

AMENDMENTS TO THE CLAIMS

Please amend claims 17, 23 and 31 as shown below, and cancel claims 22 and 27.

1-16. (Cancelled)

17. (Currently Amended) A method of using a fluorocarbon or chlorocarbon to extract oil from an oil bearing material, said method comprising:

- (a) contacting the oil bearing material with an amount of a fluorocarbon or chlorocarbon solvent at a temperature ranging from 35°C to 55°C to form a miscella ~~whereby the oil is miscible in said solvent~~, wherein said fluorocarbon or said chlorocarbon solvent is comprised of a hydrocarbon and said fluorocarbon or said chlorocarbon, with said fluorocarbon or said chlorocarbon added in an amount sufficient to cause said solvent to have a polarity equal to or less than 0;
- (b) separating said miscella from the oil bearing material;
- (c) cooling said miscella to a temperature sufficient to form distinct oil and solvent layers; and,
- (d) treating said layers so as to separate said oil from said solvent;

wherein said chlorocarbon is selected from compounds having the formula

$C_nH_{(2n+2)-x}Cl_x$, where n equals between 1-4, and x equals between 1-9.

18. (Previously Amended) The method of claim 17 wherein said fluorocarbon is selected from the group consisting of $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; and $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, wherein said chlorocarbon is selected from the group consisting of CH_2Cl_2 , $C_2H_3Cl_3$, and C_2HCl_3 .

19. (Original) The method of claim 17 wherein said fluorocarbon is a hydrofluorocarbon.

20. (Original) The method of claim 17 wherein said hydrocarbon is a hexane.

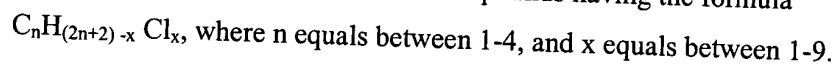
21. (Original) The method of claim 17 wherein said miscella is cooled to a temperature ranging between about 15° C and about 25° C.

22. (Cancelled)

23. (Currently Amended) A method for extracting oil from an oil bearing material so as to form an oil product comprised of greater than 95% triglycerides and other non-polar constituents, said method comprising:

- (a) forming a solvent comprised of an amount of a low molecular weight hydrocarbon having a viscosity of less than 2.6 centipoise and a non-polar fluorocarbon or chlorocarbon, with said solvent having a polarity no greater than about 0 and a viscosity ranging between about 0.3 and about 2.6 centipoise;
- (b) contacting said solvent with the oil bearing material at a temperature ranging from 35°C to 55°C ~~sufficient so that the triglycerides and the other non-polar constituents will be miscible in said solvent~~, for a time sufficient to extract an amount of oil found in the oil bearing material, thereby forming a miscella;
- (c) separating said miscella from the oil bearing material;
- (d) cooling said solvent and oil composition to a temperature sufficient to form distinct oil and solvent layers; and,
- (e) separating said oil from said solvent;

wherein said chlorocarbon is selected from compounds having the formula



24. (Previously Amended) The method of claim 23 wherein said fluorocarbon is selected from the group consisting of $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; and $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, wherein said chlorocarbon is selected from the group consisting of CH_2Cl_2 , $C_2H_3Cl_3$, and C_2HCl_3 .

25. (Original) The method of claim 23 wherein said hydrocarbon is a hexane.

26. (Original) The method of claim 23 wherein the oil bearing materials are flaked soybeans.

27. (Cancelled)

28. (Original) The method of claim 23 wherein greater than 15% of the oil bearing material is extracted.

29. (Original) The method of claim 23 wherein said miscella is cooled to a temperature ranging between about 15° C and about 25° C.

30. (Original) The method of claim 24 wherein said fluorocarbon is selected from the group consisting of hydrofluorocarbon, perfluorocarbon, and hydrochlorofluorocarbon

31. (Currently Amended) A composition comprising (a) a solvent and (b) a triglyceride mixture;

wherein said triglyceride mixture is extracted from an oil bearing material by said solvent, and said triglyceride mixture comprising greater than 95% by weight triglycerides and other non-polar constituents;

wherein said solvent comprises i) an amount of a low molecular weight hydrocarbon having a viscosity of less than 2.6 centipoise; and ii) a fluorocarbon solvent or a chlorocarbon solvent, said solvent having a polarity no greater than about 0 and a viscosity ranging between about 0.3 centipoise and about 2.6 centipoise, and wherein said chlorocarbon is selected from compounds having the formula $C_nH_{(2n+2)-x}Cl_x$, where n equals between 1-4, and x equals between 1-9;

~~whereby~~ wherein said triglyceride mixture ~~is-miscible~~ is present as miscella in said solvent at a temperature ranging between 35 °C to 55 °C, and said triglyceride mixture and said solvent phase separate at a temperature ranging between about 15 °C and about 25 °C forming distinct solvent and oil layers that can be separated.

32. (Previously Added) The composition of claim 31 wherein said fluorocarbon is selected from the group consisting of $C_nH_{(2n+2)-x}F_x$, where n equals between 4-8 and x equals between 1-17; $C_nF_{(2n+2)}$, where n equals between 5-8; $C_nCl_{(2n+2)-x}F_x$, where n equals between 1-6 and x equals between 1-13; and $C_nH_{(2n+2)-(x+f)}Cl_xF_f$, where n equals between 1-4, x equals between 1-9, and f equals between 1-9; and, wherein said chlorocarbon is selected from the group consisting of CH_2Cl_2 , $C_2H_3Cl_3$, and C_2HCl_3 .